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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,308	02/12/2004	Yuji Mizuguchi	2004_0204A	3542

52349 7590 09/26/2008  
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WASHINGTON, DC 20006

EXAMINER
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TAYONG, HELENE E

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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09/26/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/776,308	<b>Applicant(s)</b> MIZUGUCHI ET AL.	
	<b>Examiner</b> HELENE TAYONG	<b>Art Unit</b> 2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Request for Continued Examination**

1. The request filed on 9/9/08 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10776308 is acceptable and RCE has been established. An action on the RCE follows.

### ***Response to Arguments***

2. Applicants arguments regarding the rejection of claims 1-6, 8, 9, 11 and 12 under 35 U.S.C. 103(a) as being unpatentable over Nakajima et al. (U.S. Patent No. 6,504,823, hereafter "Nakajima") in view of Fee (U.S. Patent No. 6,285,475, hereafter "Fee"); and claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima in view of Fee, and further in view Becker (U.S. Patent No. 7,209,488) have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted Prior Art (APA) (figs 10-17) in view of Ray (US 20030107989).

(1) with regards to claims 1, 4, 11 and 12 ;

APA discloses in (figs. 10-17) a data transmission (apparatus and method) comprised in a system (page 2, [0004]) for transmitting a data signal in accordance with a predetermined protocol (ring-type LAN which employs MOST) in one direction within a ring network of a plurality of data transmission apparatuses (100a, 100b, ..., 100n), the data signal being obtained by modulating an electrical signal of a predetermined frequency, the data transmission apparatus (page 2, [0005]-[0006]) comprising:

signal determination means (fig. 11, 210) for determining a presence or absence of a data signal represented by an electrical signal received from an immediately upstream data transmission apparatus (page 8, [0018]) in the ring network based on a comparison between a level (218) of the electrical signal related to the received data signal and a threshold level (magnitude of the difference value) (figs. 16, 17 and page 9, [0021]-[0022]);

data evaluation means (220) for evaluating a data value of the data signal from the immediately upstream data transmission apparatus (page 9, [0022]);

processing means (processors/Microcontrollers are present in each device on the network for processing the received or transmitted electronic signals, 102 and 103) for performing a process for a result of evaluation by the data evaluation means (220) in accordance with the predetermined protocol (MOST) (page 3, [0006]); and

evaluation stopping means (difference detection section 218 derives a difference value which will be substantially zero, and outputs it to the evaluation section 210) for causing the data evaluation means (210) to stop outputting a result of evaluation to the

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processing means if the signal determination means (fig. 11, 210) determines that there is no incoming data signal (absence of an incoming electrical signal) (page 13, [0031]-[0032]); and

reset means (102 and 103), for suspending (cease to output a signal) transmission and reception of the data signal for a predetermined period (page 15, [0033]) if the signal determination (210) means determines that there is no incoming data (absence of an incoming electrical signal) (page 15, [0033]).

APA discloses wherein, when resetting a setting made in the data transmission apparatus during a boot of the ring network (page 14, [0032]), the reset means suspends transmission and reception of the data signal for a period (page 15, [0033])

APA discloses all of the subject matter discussed above, but for specifically teaching that the reset means suspends transmission and reception of the data signal for a period which is equal to or greater than a result of the multiplication between a number obtained by subtracting one from the number of data transmission apparatuses in the ring network and an amount of time required before a transmission stopping means is able to stop transmission of the data signal after the inputting of the data signal to the signal determination means stops.

However, Ray in the same endeavor (physical layer) discloses in (fig. 3, 330) reset element. A base station is adapted to enable a communication resource reset which establish communication with the link (page 2, [0012]-[0014]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the specified period of time as taught by Ray et al

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in the system of the APA in order to reset a period which is which is equal to or greater than a result of the multiplication between a number for the benefit of increased speed at the physical layer.

(2) with regards to claim 2 ;

APA further discloses transmission means (fig. 10, 100a) for transmitting the data signal to an immediately downstream data transmission apparatus (100b,..., 100n) (page 3, [0005]-[0006]); and

transmission stopping means ( difference detection section 218 derives a difference value which will be substantially zero, and outputs it to the evaluation section 210) for causing the transmission means to stop transmitting the data signal to the immediately downstream data transmission apparatus if the signal determination means determines that there is no incoming data signal ( absence of an incoming electrical signal) ( page 13, [0031]-[0032]).

(3) with regards to claim 8 ;

APA further discloses lock signal outputting means for transmitting a lock signal for establishing clock synchronization (100a) to an immediately downstream data transmission apparatus (100b) if suspension ( drastic drop in voltage of the battery 120) of transmission and reception of the data signal by the reset means is released ( page 12, [0027]-[0028]).

(4) with regards to claim 9 ;

APA further discloses training signal outputting means ( fig. 10, from 100a) for, after the lock signal is transmitted by the lock signal outputting means ( 100a) ,

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transmitting a training signal for adjusting evaluation levels used for the data value evaluation by each data transmission apparatus in the ring network ( fig. 10, 100a, 100b, page 11, [0026]).

(5) with regards to claim 10 ;

APA further discloses wherein the predetermined protocol is MOST (Media Oriented Systems Transport) ( APA discloses the system to be ring-type network for example , MOST which is commonly used in vehicle systems page 2, [0002]-[0003], page 3, [0005]-[0006]) .

5. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted Prior Art (APA) (figs 10-17) in view of Ray (US 20030107989) as applied in claim 1 above, and further in view of Fee (US6285475).

(1) with regards to claims 3 and 5;

APA discloses signal extraction means (218) for extracting the electrical signal (digital data values +8, -4, +10) of the predetermined frequency (fig. 15, page 9, [0021]),

wherein the signal determination means (210) includes:

APA as modified by Ray discloses all of the subject matter disclosed above but for specifically teaching threshold level storage means for storing the threshold signal level; and

level comparison means for determining a presence or absence of the data signal by comparing the level of the electrical signal extracted by the signal extraction means against the threshold signal level stored in the threshold level storage means.

However, Fee discloses threshold level storage means for storing the threshold signal level (col.7, lines 63-65); and level comparison means for determining a presence or absence of the data signal by comparing the level of the electrical signal extracted by the signal extraction means against the threshold signal level stored in the threshold level storage means ( col. 8, lines 7-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the method of Fee in the apparatus of APA as modified by Ray in order to storing the threshold signal level. The motivation to utilize the method of Fee in the apparatus of Nakajima et al would be to determine reliable data at an inexpensive cost.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weng et al (US 20050188232) discloses a method of managing power consumption of a network interface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENE TAYONG whose telephone number is (571)270-1675. The examiner can normally be reached on Monday-Friday 8:00 am to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Liu Shuwang can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helene Tayong/  
Examiner, Art Unit 2611

September 21, 2008  
/Shuwang Liu/  
Supervisory Patent Examiner, Art Unit 2611